This listing of claims will replace all prior versions, and listings, of claims in the application:

1.   (Previously presented) A method comprising the computer-implemented steps of:

gathering statistics by a database server about nodes that are stored in a database repository that is managed by the database server;

wherein said nodes form a hierarchy;

wherein each node is either an XML file or a container;

storing said statistics; and

in response to a request to the database server for access to one or more XML resources from said database repository, the database server computing a computational cost associated with each of two or more methods of accessing said one or more XML resources from said database repository, based on said statistics.

2.   (Previously presented) The method of Claim 1,

wherein the step of gathering statistics comprises gathering one or more data from a group consisting of

a total number of nodes, in said hierarchy, that are accessible via a path through a specified node,

a total number of containers, in said hierarchy, that are accessible via a path through said specified node,

a total number of nodes, in said hierarchy, that are accessible via a path through said specified node and that are in a level of said hierarchy that is immediately under a level of said specified node,

a total number of containers, in said hierarchy, that are accessible via a path through said specified node and that are in a level of said hierarchy that is immediately under said level of said specified node, and

a number of levels, from a root node of said hierarchy, at which said specified node is organized in said hierarchy.

3.   (Previously presented) The method of Claim 1

wherein the step of gathering statistics comprises gathering each of

a total number of nodes, in said hierarchy, that are accessible via a path

through a specified node,

a total number of containers, in said hierarchy, that are accessible via a

path through said specified node,

a total number of nodes, in said hierarchy, that are accessible via a path

through said specified node and that are in a level of said hierarchy

that is immediately under a level of said specified node,

a total number of containers, in said hierarchy, that are accessible via a

path through said specified node and that are in a level of said

hierarchy that is immediately under said level of said specified

node, and

a number of levels, from a root node of said hierarchy, at which said

specified node is organized in said hierarchy.

4.   (Original) The method of Claim 1, wherein the step of storing statistics comprises storing said statistics in a relational table of a database of which said database repository is part.

5.   (Previously presented) The method of Claim 4, wherein XML files of said nodes are XML resources, and wherein said relational table is a first relational table that is a different table than a second relational table in which said XML resources are stored in said database repository.

6.   (Original) The method of Claim 4, wherein said relational table is a relational table in which said XML resources are stored in said database repository.

7.   (Previously presented) The method of Claim 1, wherein XML files of said nodes are XML resources, and wherein the step of storing statistics comprises storing said statistics in a hierarchical index table in which said XML resources are indexed to said database repository.

8.   (Original) The method of Claim 1, wherein the step of computing a computational cost comprises computing a selectivity value for each of one or more predicates, from said request, that contain operators on said database repository.

9.   (Previously presented) The method of Claim 8, wherein XML files of said nodes are XML resources, and wherein each of said XML resources is stored, in association with a location of a node in said hierarchy, in a column of a table in said database repository, and wherein an operator contained in at least one of said one or more predicates is an operator that determines whether a particular XML resource can be located in said database repository through a particular specified path through a portion of said hierarchy.

10.   (Previously presented) The method of Claim 8, wherein XML files of said nodes are XML resources, and wherein each of said XML resources is stored, in association with a location of a node in said hierarchy, in a column of a table in said database repository, and wherein an operator contained in at least one of said one or more predicates is an operator that determines whether a particular XML resource can be located in said database repository at a terminal location of a particular specified path through a portion of said hierarchy.

11.   (Previously presented) The method of Claim 1, wherein XML files of said nodes are XML resources, and wherein the step of computing a computational cost comprises computing a computational cost of traversing, to locate a particular XML resource specified in said request, an index in which said XML resources are indexed to said database repository.

12.   (Original) The method of Claim 11, wherein computing said computational cost of traversing an index comprises computing a computational cost associated with one or more CPUs used for said traversing.

13.   (Original) The method of Claim 11, wherein computing said computational cost of traversing an index comprises computing a computational cost associated with reading data blocks in which portions of said index are stored.

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14.   (Original) The method of Claim 11, wherein computing said computational cost of traversing an index comprises computing (a) a computational cost associated with one or more CPUs used for said traversing and (b) a computational cost associated with reading data blocks in which portions of said index are stored.

15.   (Previously presented) The method of Claim 1, wherein XML files of said nodes are XML resources, and wherein the step of computing a computational cost comprises (a) computing a selectivity value for each of one or more predicates, from said request, that contain operators on said database repository and (b) computing a computational cost of traversing, to locate a particular XML resource specified in said request, an index in which said XML resources are indexed to said database repository.

16.   (Original) The method of Claim 1, wherein said request for access to one or more XML resources from said database repository is a SQL query.

17.   (Previously presented) The method of Claim 16, wherein XML files of said nodes are XML resources, and wherein each of said XML resources stored, in association with a location of a node in said hierarchy, in a column of a table in said database repository, and wherein said SQL query comprises a mechanism for providing at least one possible path through said hierarchy to each node of said XML resources.

18.   (Original) The method of Claim 17, wherein the step of computing a computational cost comprises computing a computational cost component for one or more predicates, from said request, that contain an operator in conjunction with said mechanism acting on said database repository.

19.   (Previously presented) The method of Claim 16, wherein XML files of said nodes are XML resources, and wherein each of said XML resources is stored, in association with a location of a node in said hierarchy, in a column of a table in said database repository, and wherein said SQL query comprises a mechanism for

providing all possible paths through said hierarchy to each node of said XML resources.

20.   (Original) The method of Claim 19, wherein the step of computing a computational cost comprises computing a computational cost component for one or more predicates, from said request, that contain an operator in conjunction with said mechanism acting on said database repository.

21.   (Original) The method of Claim 1, wherein said database repository is part of a relational database management system.

22.   (Previously presented) A computer-readable storage medium storing one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 1.

23.   (Previously presented) A computer-readable storage medium storing one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 2.

24.   (Previously presented) A computer-readable storage medium storing one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 3.

25.   (Previously presented) A computer-readable storage medium storing one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 4.

26.   (Previously presented) A computer-readable storage medium storing one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 5.

27.   (Previously presented) A computer-readable storage medium storing one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 6.

28.   (Previously presented) A computer-readable storage medium storing one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 7.

29.   (Previously presented) A computer-readable storage medium storing one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 8.

30.   (Previously presented) A computer-readable storage medium storing one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 9.

31.   (Previously presented) A computer-readable storage medium storing one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 10.

32.   (Previously presented) A computer-readable storage medium storing one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 11.

33.   (Previously presented) A computer-readable storage medium storing one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 12.

34.   (Previously presented) A computer-readable storage medium storing one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 13.

35.   (Previously presented) A computer-readable storage medium storing one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 14.

36.   (Previously presented) A computer-readable storage medium storing one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 15.

37.   (Previously presented) A computer-readable storage medium storing one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 16.

38.   (Previously presented) A method comprising the computer-implemented steps of:
       gathering, by a database management system, statistics about how many nodes
              that are stored in a repository of said database management system satisfy
              certain criteria;
       wherein said nodes form a hierarchy;
       wherein each node is either an XML file or a container;
       wherein XML files of said nodes are XML resources;
       storing said statistics in said database management system; and
       the database management system using the statistics to determine how to process
              a query that accesses one or more XML resources.

39.   (Previously Presented) The method of Claim 38, wherein the step of storing comprises storing said statistics as an XML data type in a schema-based table in said database management system.

40.   (Previously presented) The method of Claim 38
       wherein the step of gathering statistics comprises gathering each of
              a total number of nodes, in said hierarchy, that are accessible via a path
                     through a specified node,
              a total number of containers, in said hierarchy, that are accessible via a
                     path through said specified node,
              a total number of nodes, in said hierarchy, that are accessible via a path
                     through said specified node and that are in a level of said hierarchy
                     that is immediately under a level of said specified node, and

a total number of containers, in said hierarchy, that are accessible via a

path through said [[a]] specified node and that are in a level of said

hierarchy that is immediately under said level of said specified

node.

41.   (Previously presented) A computer-readable storage medium storing one or more

sequences of instructions which, when executed by one or more processors,

causes the one or more processors to perform the method recited in Claim 38.

42.   (Previously presented) A method comprising the computer-implemented steps of:

in response to a request for access to one or more XML resources from a

database repository within a database management system,

accessing, from said database management system, statistics about

a structure of a hierarchy associated with said one or more

XML resources;

wherein nodes form said hierarchy;

wherein each node of said hierarchy is either an XML file or a

container; and

computing a computational cost associated with each of two or

more methods of accessing said one or more XML

resources from said database repository, based on said

statistics.

43.   (Original) The method of Claim 42, wherein the step of computing a

computational cost comprises computing a selectivity value for each of one or

more predicates, from said request, that contain operators on said database

repository.

44.   (Previously presented) The method of Claim 42, wherein XML files of said nodes

are XML resources, and wherein the step of computing a computational cost

comprises computing a computational cost of traversing, to locate particular XML

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resources specified in said request, an index in which said XML resources are indexed to said database repository.

45.   (Previously presented) The method of Claim 42, wherein XML files of said nodes are XML resources, and wherein the step of computing a computational cost comprises (a) computing a selectivity value for each of one or more predicates, from said request, that contain operators on said database repository and (b) computing a computational cost of traversing, to locate a particular XML resource specified in said request, an index in which said XML resources are indexed to said database repository.

46.   (Previously presented) A computer-readable storage medium storing one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 42.

47.   (Currently amended) A database system comprising:
        an XML data repository within a relational database management system; and
        a query optimizer that is executing on one or more hardware processors, wherein
                the query optimizer is configured to receive a database query and, in
                response to said database query, formulate a query execution plan based
                on computational costs of access paths associated with XML data stored in
                said repository, wherein said computational costs are based on statistics
                characterizing an organizational structure of nodes under each of one or
                more particular paths of an organizational structure of said XML data;
                wherein said nodes form a hierarchy;
                wherein each node is either an XML file or a container.

48.   (Currently amended) A system comprising:
        one or more hardware processors;

means, executing on the one or more <u>hardware</u> processors, for gathering statistics
by a database server about nodes that are stored in a database repository
that is managed by the database server;

means, executing on the one or more <u>hardware</u> processors, for storing said
statistics; and

means, executing on the one or more <u>hardware</u> processors, for computing, in
response to a request to the database server for access to one or more
XML resources from said database repository and based on said statistics,
a computational cost, by the database server, associated with each of two
or more methods of accessing said one or more XML resources from said
database repository;

wherein said nodes form a hierarchy;

wherein each node is either an XML file or a container.

49.   (Previously presented) The method of Claim 1 wherein the step of gathering
statistics comprises gathering statistics about a median depth of a plurality of
paths to a plurality of nodes in said hierarchy, and wherein the plurality of nodes
are accessible via a path through a specified node.

50.   (Previously presented) The method of Claim 1, wherein the step of gathering
statistics comprises gathering statistics about a maximum depth of a plurality of
paths to a plurality of nodes in said hierarchy and wherein the plurality of nodes
are accessible via a path through a specified node.